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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,257	09/19/2003	Robert J. Magyar	920047-94539	1147

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EXAMINER

NGUYEN, DANNY

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,257

Applicant(s)

MAGYAR ET AL.

Examiner

Danny Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: In claim 1, line 5, "transmitting voltage" should be "transmitting a voltage or voltages". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 9, "receiving voltage" is unclear

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (USPN 5,450,270).

Regarding claims 1, 6, 7, 13, Takahashi discloses a valve control circuit (figures 1, 2, 5, 6) comprises a process control apparatus (such as a process apparatus of the controller 1 shown in figure 5) generating a plurality of data signals, each signal corresponding to an operating parameter of the valve (such as current intervals and open and close valve time intervals, see figures 6b-6c), a valve control apparatus (e.g. valve controller 1) transmitting a voltage (such as a voltage waveform in figure 6d is transmitted from the controller to the valve to the operation of the valve, the valve control apparatus receiving at least one operating data signal generated by the process control apparatus, the valve having a current flow created therein upon receiving voltage from the valve control apparatus, a current sensing apparatus (current sensor 3) senses the flow of current in the valve (col. 1, lines 63-64), the current sensing apparatus creating a signal (signal S, col. 3, lines 53-54) responsive to the current flow in the valve, the signal (signal S) created by the current sensing apparatus applied to the valve control apparatus (see figure 2), the valve control controls the valve response to the signal from the current sensor (see figure 5b, 6b, 6c, col. 3 and 4, lines 53-18).

Regarding claims 2, 4, Takahashi discloses a first polarized current is established in the valve to initiate motion of the valve in a first direction (a positive current portion at time interval t1 applied to start a motion of the valve from an open position to a closed position, col. 3, lines 61-64), a second reduced current is established in the valve to stabilize the position of the valve in a first predetermined position (the reduced current portion at the time interval t0 in figure 6c, col. 3, 4, lines 65-2).

Regarding claims 3, 5, Takahashi discloses a third oppositely polarized current is established in the valve to initiate motion of the valve in a second direction (such as the direction of current changes from the positive to a negative direction to start the valve to move from the closed position to the open position, see figure 6b, 6c), a second reduced current (such as a flat current portion in figures 6) is established in the valve to stabilize the position of the valve in a second predetermined position.

4. Claims 1, 8-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Near (USPN 6,978,978).

Regarding claims 1, 13, 15 Near discloses a valve control circuit (figure 2b, 3) comprises a process control apparatus (such as a process circuits 33, 66) generating a plurality of electrically data signals, each signal corresponding to an operating parameter of the valve (such as valve open time, current magnitude, change voltage, col. 7, lines 1-26, lines 48-60), a valve control apparatus (e.g. valve controller 11) transmitting a voltage to the valve to the operation of the valve (the voltage is transmitted to the valve 31 via power drivers 76 and 92), the valve control apparatus receiving at least one operating data signal generated by the process control apparatus (the controller receives the status current of the valve from the current feed back sensor 20) , the valve having a current flow created therein upon receiving voltage from the valve control apparatus, a current sensing apparatus (current sensor 20) senses the flow of current in the valve, the current sensing apparatus creating a signal (feed back signal) responsive to the current flow in the valve, the signal created by the current

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sensing apparatus applied to the valve control apparatus, the valve control controls the valve response to the signal from the current sensor (see col. 7, lines 1-21).

Regarding claims 8-10, 16, 17, Near discloses upon the detection of current, the valve control reduces the voltage applied to the valve (col. 4, lines 39-46, col. 8, lines 6-9).

Regarding claims 11, 12, 14, 18, Near discloses the valve includes a coil (, and the current sensor comprises a resistor (col. 6, lines 60-65) in series the coil, the current passing through the resistor creates a voltage drop, wherein the voltage drop provides a feed back signal (see col. 7, lines 1-21).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

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3/22/2006



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